NAME OF WORK : Construction Of Synthetic Tennis Court,Street Vending Zone & Other Developmental Works At Judicial Layout Main And Cross Roads, Chikkabommasandra, Someshwara Nagar,Allalasandra Village & Surrounding Areas In Ward No-04 Of Yelahanka Division Under Amruth Nagarothan Grants. (Package No-06)

PMC

First and Part Bill

(Book No.01)

RUDRAPRASAD CONSULTANTS
Structural Engineers, Architects &
Project Management Consultants

Date: 28-09-2020

To,

ASSISTANT EXECUTIVE ENGINEER

YELAHANKA NEW TOWN SUB DIVISION

BBMP

BANGALORE

Dear Sir,

Sub: M/s. Rudraprasad Consultants Services for the work of **"CONSTRUCTION OF SYNTHETIC TENNIS COURT, STREET VENDING ZONE & OTHER DEVELOPMENTAL WORKS AT JUDICIAL LAYOUT MAIN AND CROSS ROADS, CHIKKABOMMASANDRA, SOMESHWARA NAGAR, ALLALASANDRA VILLAGE AND SURROUNDING AREAS IN WARD NO 04 OF YELAHANKA DIVISION UNDER AMRUTH NAGAROTHAN GRANTS. (PACKAGE NO-06)"**

Ref: 1. Work Order No: BBMP/EE/YNK.D/EPMT-06/W.O/35/2022-23

2. Job code: 004-23-000003

We are here with forwarding to M/s SMLP Asphalts (Pro B.B. Umesh), No:1265, Ground Floor, HIG B Sector, Yelahanka New Town, Bangalore-560064. First & Part Bill duly verified and certified that the work is satisfactory and for a Gross Value of Rs.7,74,51,138.00/- (Rs. Seven Crore Seventy Four Lakhs Fifty One Thousand One Hundred and Thirty Eight Only).

Thanking you,

Yours faithfully,

RUDRAPRASAD CONSULTANTS BANGALORE

For Rudraprasad Consultants

R. KARTHIK RECHAN B.E, M.S (U.S.A)
PRINCIPAL CONSULTANT
RUDRAPRASAD CONSULTANTS

Attachments PMC Compliance report

#3, 7th Main Malleswaram, Bangalore – 560003
Telefax: 9180 23444801, Mobile: 91 9972924526
Web: www.arkengineers.com e-mail: rechan6630@yahoo.co.in

RUDRAPRASAD CONSULTANTS
Structural Engineers, Architects &
Project Management Consultants

NAME OF WORK:- Construction of Synthetic Tennis Court, Street Vending Zone & Other Developmental Works at Judicial Layout Main and Cross Roads, Chikkabommasandra, Someshwara Nagar, Allalasandra Village and Surrounding Areas in Ward No 04 of Yelahanka Division under Amruth Nagarothan Grants. (PACKAGE No-06)

Name of Client	:	EXECUTIVE ENGINEER, YELAHANKA DIVISION, BBMP, BANGALORE
Contractor/ Agency	:	M/s SMLP Asphalts (Pro B.B. Umesh), No:1265, Ground Floor, HIG B Sector, Yelahanka New Town, Bangalore-560064
Total Cost	:	Rs. 7,74,51,138.00/-
Date Of Inspection	:	28-09-20
Status Of Bill	:	First & Part Bill
In the Presence of	:	a) Assistant Engineer Yelahanka division, BBMP, Bangalore b) R. Karthik Rechan, Partner, M/S RUDRAPRASAD CONSULTANTS, BANGALORE

PMC COMPLIANCE REPORT		
Sl. No.	**Description of work**	**Comments/Observations**
1	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead I By Manual Means B Cement Concrete Grade M-15 & M-20 and directions of the Engineer in charge.	Work done upto the Billed Quantity and the Quality is satisfactory

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬ.ಬ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-೧೦೯

RUDRAPRASAD CONSULTANTS BANGALORE

#3, 7th Main Malleswaram, Bangalore – 560003
Telefax: 9180 23444801, Mobile: 91 9972924526
Web: www.arkengineers.com e-mail: rechan6630@yahoo.co.in

2	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead (iii) Dismantling Stone Masonry B Rubble stone masonry in cement mortar. and directions of the Engineer in charge.	Work done upto the Billed Quantity and the Quality is satisfactory
3	Removing and refixing stone slabs of drains and pointing in CM (1:3) and directions of the Engineer in charge.	Work done upto the Billed Quantity and the Quality is satisfactory
4	Removing and refixing of footpath slab (Data Rate) and directions of the Engineer in charge.	Work done upto the Billed Quantity and the Quality is satisfactory
5	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. and directions of the Engineer in charge.	Work done upto the Billed Quantity and the Quality is satisfactory
7	Providing one line dressing to granite stone slab / granite stone masonry as per specifications as directed by the Engineer in Charge of the work. (excluding GST and Area Leading Charges)(Data Rate) and directions of the Engineer in charge.. and directions of the Engineer in charge.	Work done upto the Billed Quantity and the Quality is satisfactory

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-106

RUDRAPRASAD CONSULTANTS BANGALORE

#3, 7th Main Malleswaram, Bangalore – 560003
Telefax: 9180 23444801, Mobile: 91 9972924526
Web: www.arkengineers.com e-mail: rechan6630@yahoo.co.in

8	Providing and laying in position plain cement concrete Mix 1:3:6 (M10) for levelling course for all works in foundation. Using 40 mm nominal size graded crushed coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. and directions of the Engineer in charge.	Work done upto the Billed Quantity and the Quality is satisfactory
9	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. M20 (The cost of steel reinforcement & formwork to be paid separately) and as per the directions of the Engineer-in-charge of the work	Work done upto the Billed Quantity and the Quality is satisfactory
10	Supplying, Fitting and Placing TMT Fe550 bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications. and directions of the Engineer in charge.	Work done upto the Billed Quantity and the Quality is satisfactory
11	Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery ,loading ,unloading, lead and lift,transportation etc ,complete. and as per the directions of the Engineer-in-charge of the work	Work done upto the Billed Quantity and the Quality is satisfactory

RUDRAPRASAD CONSULTANTS BANGALORE

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬ.ಡ.ವಂ.ಪಿ. ಬೆಂಗಳೂರು-೧೦೬

#3, 7th Main Malleswaram, Bangalore – 560003
Telefax: 9180 23444801, Mobile: 91 9972924526
Web: www.arkengineers.com e-mail: rechan6630@yahoo.co.in

12	Providing and Fixing pre cast covering Slab 150mm thick made out of CC , Jelly 20mm Down Size with steel reinforcement including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc, complete as per Engineer incharge. (Data Rate) and directions of the Engineer in charge	Work done upto the Billed Quantity and the Quality is satisfactory
13	Providing and Fixing pre cast covering Slab 230mm thick made out of CC , Jelly 20mm Down Size with steel reinforcement including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc, complete and as per the directions of the Engineer-in-charge of the work	Work done upto the Billed Quantity and the Quality is satisfactory
14	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paidseparately) Mix 1:2:4 (M15) Using 20 mm nominal size graded crushed coarse aggregates and directions of the Engineer in charge.	Work done upto the Billed Quantity and the Quality is satisfactory

ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-೧೦೬

RUDRAPRASAD CONSULTANTS BANGALORE

#3, 7th Main Malleswaram, Bangalore – 560003
Telefax: 9180 23444801, Mobile: 91 9972924526
Web: www.arkengineers.com e-mail: rechan6630@yahoo.co.in

15	Providing and fixing pre cast solid cement concrete Kerb Stones made out of M20 with top and bottom width 114 and 165mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading, unloading, lead and lift transportion etc., complete as directed by the Engineer in charge of the work(from finish concrete and no painting to be done)(Data Rate) and directions of the Engineer in charge.	Work done upto the Billed Quantity and the Quality is satisfactory
34	Providing and applying Epoxy paint of approved quality over newly laid cement concrete surface for cycle track with 2coats of primer @0 35kg/Sqm) one mid coat sprayed at 2.1kg per sqm mixed with m Sand at 3.15kg per Sqm and one top coat sprayed at 0 35kg per Sqm along with marking and painting of cycle symbol at every 50m, arrows at front and back of the cycle symbol and edge lane marking with cleaning making all necessary arrangements before painting of each layer along with all labours, lead lift, transportation of materials, HOM of Machinaries as per approved drawing, specifications and as per the instructions of Engineer In Charge Complete. (Data Rate)	Work done upto the Billed Quantity and the Quality is satisfactory
35	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material to the appropriate disposal area as per direction of Engineer-in-charge in Cement motor	Work done upto the Billed Quantity and the Quality is satisfactory
36	Dismantling tile work in floors and roofs laid in cement mortar including stacking material to the appropriate disposal area as per direction of Engineer-in-charge. For thickness of tiles 10 mm to 25 mm	Work done upto the Billed Quantity and the Quality is satisfactory
37	Demolishing R.C.C work manually by mechanical means including stacking of steel bars and dispoasal of unserviceable material to the appropriate disposal area as per direction of Engineer-in -charge	Work done upto the Billed Quantity and the Quality is satisfactory

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬಿ.ಬಿ.ಎಂ.ಪಿ, ಬೆಂಗಳೂರು-೧೦೬

RUDRAPRASAD CONSULTANTS BANGALORE

#3, 7th Main Malleswaram, Bangalore – 560003
Telefax: 9180 23444801, Mobile: 91 9972924526
Web: www.arkengineers.com e-mail: rechan6630@yahoo.co.in

38	Earth work excavation for Foundation by mechanical means for all works & depth upto 3 m, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenaces required to complete the work. In ordinary/soft rock without blasting upto 1.5 m depth	Work done upto the Billed Quantity and the Quality is satisfactory
39	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work Depth exceeding 1.5m, but not exceeding 3 m	Work done upto the Billed Quantity and the Quality is satisfactory
40	Providing and Filling in foundation with granite / trap broken metal 100mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications.	Work done upto the Billed Quantity and the Quality is satisfactory
41	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations and other similar works etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	Work done upto the Billed Quantity and the Quality is satisfactory
42	Providing Size Stone masonry with hard stone in foundation & plinth with Cement mortar 1:6 (1 cement : 6 coarse sand)	Work done upto the Billed Quantity and the Quality is satisfactory

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬ.ಬ.ಪಂ.ಕ. ಬೆಂಗಳೂರು-106

RUDRAPRASAD CONSULTANTS BANGALORE

#3, 7th Main Malleswaram, Bangalore – 560003
Telefax: 9180 23444801, Mobile: 91 9972924526
Web: www.arkengineers.com e-mail: rechan6630@yahoo.co.in

43	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/ trap/ basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates	Work done upto the Billed Quantity and the Quality is satisfactory
44	Providing and laying in position Reinforced cement concrete for all Foundation works. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticizers laid in finished layers, well compacted using needle vibrators, including all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all the other appurtenances required to complete the work as per technical specifications. M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates with 20% partial replacement with Recycled concrete aggregate (RCA).	Work done upto the Billed Quantity and the Quality is satisfactory

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬ.ಬ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-೧೦೬

RUDRAPRASAD CONSULTANTS BANGALORE

#3, 7th Main Malleswaram, Bangalore – 560003
Telefax: 9180 23444801, Mobile: 91 9972924526
Web: www.arkengineers.com e-mail: rechan6630@yahoo.co.in

45	Providing and laying in position Reinforced cement concrete for all Foundation works. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticizers laid in finished layers, well compacted using needle vibrators, including all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all the other appurtenances required to complete the work as per technical specifications. M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates with 20% partial replacement with Recycled concrete aggregate (RCA).	Work done upto the Billed Quantity and the Quality is satisfactory
54	Providing Thermo-Mechanically Treated bars of grade Fe-550 Steel reinforcement for R C C. work including straightening, cutting, bending, placing in position, binding and anchoring to adjacent members whereever necessary complete as per Design including cost of material, labour, usage charges complete as per specifications. (The laps and wastages shall not be measured separately) and directions of the Engineer in charge.	Work done upto the Billed Quantity and the Quality is satisfactory
60	Providing and laying water proofing treatment to the Roof with PU based single component elastomeric pure polyurethane based coating on New terrace/Chajjas/Sunken portion of WC:Bathroom, cold applied PU waterproofing membrane that is highly elastic with elongation greater than 400% and tensile strength greater than 2MPa as per ASTM D412. The waterproofing membrane to be applied in 2coats @ 1.6kg per m2 to achieve final DFT (dry film thickness) of 1mm including prime coat of epoxy primer @150 g per m2 and protection with 120gsm Geo-textile over the waterproofing membrane. The finished cost to include surface preparation, making coving at Junction, Bore Packing, treatment of construction joints completely as per specification & with a 10 years warranty on product & work from certified manufacturers as per the direction of the Engineer In charge.	Work done upto the Billed Quantity and the Quality is satisfactory

RUDRAPRASAD CONSULTANTS BANGALORE

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪವಿಭಾಗ.
ಬ.ಬ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು

#3, 7th Main, Malleswaram, Bangalore – 560003
Telefax: 9180 23444801, Mobile: 91 9972924526
Web: www.arkengineers.com e-mail: rechan6630@yahoo.co.in

63	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x200x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications.	Work done upto the Billed Quantity and the Quality is satisfactory
64	Providing 20 mm cement plaster of mix :1:4 (1 cement: 4 fine sand) to brick/stone masonary including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge	Work done upto the Billed Quantity and the Quality is satisfactory
66	Providing 18 mm cement plaster in two coats under layer 12 mm thick cement plaster with cement mortar 1:5 (1 cement : 5 coarse sand) and a top layer 6 mm thick cement plaster with cement mortar 1:3 (1 cement: 3 coarse sand) finished rough with sponge to brick masonry including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge.	Work done upto the Billed Quantity and the Quality is satisfactory
68	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :Two coats on new work after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge.	Work done upto the Billed Quantity and the Quality is satisfactory
69	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete as per specifications and as per directions of Engineer in charge.	Work done upto the Billed Quantity and the Quality is satisfactory

RUDRAPRASAD CONSULTANTS BANGALORE

#37, 7th Main Malleswaram, Bangalore – 560003
Telefax: 9180 23444801, Mobile: 91 9972924526
Web: www.arkengineers.com e-mail: rechan6630@yahoo.co.in

70	Finishing walls with water proofing cement paint of required shade :New work (Two coats applied @ 4.84 kg/10 m²) to give an even shade after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge.	Work done upto the Billed Quantity and the Quality is satisfactory
72	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ m2 including grouting the joints with white cement and matching pigments etc., complete	Work done upto the Billed Quantity and the Quality is satisfactory
73	Providing and fixing flush door shutter made out of solid core block board type, well seasoned , chemicaly treated hard wood battens and internal frame with minimum 45 mm wide wooden frame alround door shutters covered with cross bonded wooden sheets (core veneer) hot pressed and fastened on both sides of the door useing liquid phenol formaldehyde resin as per IS specifications 2202 (part-I) 1991. from manufacturer complete as per spcification..-do- 30 mm thick both side commercial	Work done upto the Billed Quantity and the Quality is satisfactory
74	Providing Salwood frames of doors, windows, clerestory windows, ventilators and other frames, wrought, framed or assembled including making plaster groves (excluding cost of cement concrete and side clamps), but including cost of materials, labour, usage charges complete as per specifications.	Work done upto the Billed Quantity and the Quality is satisfactory

ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬ.ಜ.ಎಂ.ಕ. ಬೆಂಗಳೂರು-೫೬

RUDRAPRASAD CONSULTANTS BANGALORE

#3, 7th Main Malleswaram, Bangalore – 560003
Telefax: 9180 23444801, Mobile: 91 9972924526
Web: www.arkengineers.com e-mail: rechan6630@yahoo.co.in

75	Providing & fixing of 3-track x 2-panel sliding windows made out of multi chambered UPVC(Matching to RAL-9016) sections and with minimum TiO2(Titanium Dioxide) at 6PHR with TPE(Thermo Plastic Elastomer) and lead free, gaskets -grey colour having isolated drainage and reinforced with Galvanized Iron profile through-out the window frame. The outer frame having an overall size of 108mm width x 45mm height with reinforcement of 1mm thickness and Sash with overall size of 39mm x 75mm with GI reinforcement of 2mm and mesh sash of size 37mm x 58mm. Coextruded Glazing bead for fixing of glass shall be of size 20mm x 24 mm. Windows shall be provided with 6mm plain float glass, standard hardware& Multi point locking system with touch lock. Wall thickness of frame & sash shall be of 2mm-2.5mm. Maximum possible size – 2419mm x 2200mm. (The cost is inclusive of all fixtures and separate charges for minor T&P's shall not be made).	Work done upto the Billed Quantity and the Quality is satisfactory
77	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approvedsteel primer all complete. Fixed to openings / wooden frames with rawl plugs screws etc.	Work done upto the Billed Quantity and the Quality is satisfactory
79	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two coat applied @ 0.90 ltr/10 m² over an under coat of primer applied @ 0.80 ltr/10 m² of approved brand and manufacture including preparing the surface after thorougly cleaning oil, grease, dirt and foreign matter, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge.	Work done upto the Billed Quantity and the Quality is satisfactory

ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ.
ಬ.ಬ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-106

RUDRAPRASAD CONSULTANTS BANGALORE

RUDRAPRASAD CONSULTANTS
Structural Engineers, Architects &
Project Management Consultants

88	Design and Detailed Enginnering supply and Erection of Structural Steel Support complete with 2 coat of epoxy primer coating and with necessary fixing transportation site supervision and commissioning of tensioned membrane structure including preparation of membrane shop drawings of PVC tensioned membraneRoof Structure consisting of Flying mast out of IS make CHS Floder clips.Aluminium clamp boards hardware like bolts screws washers,keder profile extrusion to recive bolts galvonized cablex as perindian standard.The tensile membrane made from germany make mehler valmex FR900-type II,with 100% white colour,PVDF-lacquer on both sides protected against microbat and fungal attack UV-protected with weight og 90g/sqm with 25 years warranty all inclusive and complete as per Engineers instructions includig all lead and lift and as per the directions of the Engineer incharge.1.Tenders shall not be under a Declaration of ineligibility for corrupt	Work done upto the Billed Quantity and the Quality is satisfactory
89	Construction of Embankment with approved materials deposited at site from roadway cutting and excavation from drain and foundation of other structures graded with desired compaction.	Work done upto the Billed Quantity and the Quality is satisfactory
90	Construction of Embankment by excavating the available approved Gravel/Murrum deposited at a place or borrow pits during or prior excavation with all lifts and lead, transportation to site, spreading, grading to required slope and compacting to meet the requirement complete as per specifications, including cost of labour,rolling,water, all materials,usage& all other appurtenaces required to complete the work.	Work done upto the Billed Quantity and the Quality is satisfactory
91	Providing and placing on terrace(at all floor levels), polyethylene water storage tanks as per IS 12701 marked,with cover and suitable locking arrangement and making necessary holes for inlet,outlet and overflow pipes but without fittings and the base support for tank(For 1000 litre capacity)	Work done upto the Billed Quantity and the Quality is satisfactory

RUDRAPRASAD CONSULTANTS BANGALORE

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಜ ಬ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-106

#3, 7th Main Malleswaram, Bangalore – 560003
Telefax: 9180 23444801, Mobile: 91 9972924526
Web: www.arkengineers.com e-mail: rechan6630@yahoo.co.in

94	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing , curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge. ** Polished Granite stone slab Black, Cherry Red, Brown, Cat Eye, River Pink or equivalent. and as per the direction of engineer incharge of work..	Work done upto the Billed Quantity and the Quality is satisfactory
102	Loading and Unloading of Stone Boulder/Stone aggregates/ Sand/Kankar/Moorum. (Tipper 5.5 m3)	Work done upto the Billed Quantity and the Quality is satisfactory
103	Cost of Haulage Excluding Loading and Unloading Taking output 10 t load and lead 10 km = 100 t.km	Work done upto the Billed Quantity and the Quality is satisfactory
104	Concealed Conduit System Supplying heavy gauge PVC conduit pipe .....mm dia .....mm thick confirming to IS 2509 with suitable size bends, metal/PVC junction boxes, adhesive paste etc., and running before concreting the slab. The conduit should be tied to the reinforcement rods by using binding wires and unused ways of junction boxes and pipe ends should be covered using PVC end enclosures, run with 18SWG GI fish wire wherever necessary 19/20mm dia 2mm thick(including audio system)complete and as per the directions of the Engineer-in-charge of the work.	Work done upto the Billed Quantity and the Quality is satisfactory
105	Concealed Conduit System Supplying heavy gauge PVC conduit pipe .....mm dia .....mm thick confirming to IS 2509 with suitable size bends, metal/PVC junction boxes, adhesive paste etc., and running before concreting the slab. The conduit should be tied to the reinforcement rods by using binding wires and unused ways of junction boxes and pipe ends should be covered using PVC end enclosures, run with 18SWG GI fish wire wherever necessary 25mm dia 2mm thick(including audio system)complete and as per the directions of the Engineer-in-charge of the work 25mm dia 2mm thick	Work done upto the Billed Quantity and the Quality is satisfactory

RUDRAPRASAD CONSULTANTS BANGALORE

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ, ಬೆಸ್ಕಾಂ.
ಬೆ.ಎ.ಪಿ. ಬೆಂಗಳೂರು-560003

No.10 Main Malleswaram, Bangalore – 560003
Telefax: 9180 23444801, Mobile: 91 9972924526
Web: www.arkengineers.com e-mail: rechan6630@yahoo.co.in

106	Concealed Conduit System Supplying heavy gauge PVC conduit pipe .....mm dia .....mm thick confirming to IS 2509 with suitable size bends, metal/PVC junction boxes, adhesive paste etc., and running before concreting the slab. The conduit should be tied to the reinforcement rods by using binding wires and unused ways of junction boxes and pipe ends should be covered using PVC end enclosures, run with 18SWG GI fish wire wherever necessary 32mm dia 2mm thick thick(including audio system)complete and as per the directions of the Engineer-in-charge of the work	Work done upto the Billed Quantity and the Quality is satisfactory
107	Extra for Groove cutting in brick wall/CC floor to the suitable depth for concealing of Conduit/GI pipe and plastering, finishing upto wall surface complete upto 50mm conduit in brick wall.	Work done upto the Billed Quantity and the Quality is satisfactory
108	Supplying and fixing of PVC casing and capping on the wall or ceiling using necessary materials like bends, screws at an interval of 300mm .... etc. as required. 25mm.	Work done upto the Billed Quantity and the Quality is satisfactory
109	Supplying PVC/GI flexible conduit pipe... mm dia fixing on surface over inverted tapered wooden plugs or phill plugs or rawl plugs and clamped using heavy gauge saddles at an interval of 300mm using NF screws and on either end of the pipe terminated completely 25mm complete and as per the directions of the Engineer-in-charge of the work.	Work done upto the Billed Quantity and the Quality is satisfactory
110	Supplying And Fixing Metal Fan Box with Round Hook	Work done upto the Billed Quantity and the Quality is satisfactory
111	Point wiring using Copper wire without switch. Supplying and wiring adopting loop system in existing PVC Conduit / casing capping using 1100V grade, COPPER conductor flexible multistrand FRLS PVC insulated, 2X1.5Sq mm Cable confirming to the GTP without switch, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block complete for each outlet. GROUP A. Short point upto 3Mtr from tapping point to out let via switch box	Work done upto the Billed Quantity and the Quality is satisfactory

RUDRAPRASAD CONSULTANTS BANGALORE

#3, 7th Main Malleswaram, Bangalore – 560003
Telefax: 9180 23444801, Mobile: 91 9972924526
Web: www.arkengineers.com e-mail: rechan6630@yahoo.co.in

112	Medium point above 3Mtr upto 6Mtr from tapping point to out let via switch box.	Work done upto the Billed Quantity and the Quality is satisfactory
113	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand Copper with low conductor resistance single core wire in open or concealed system of wiring with specified IS-694:1990 & confirming to GTP of GROUP -A. 1.5 sqmm.	Work done upto the Billed Quantity and the Quality is satisfactory
114	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand Copper with low conductor resistance single core wire in open or concealed system of wiring with specified IS-694:1990 & confirming to GTP of GROUP -A 2.5 sqmm	Work done upto the Billed Quantity and the Quality is satisfactory
115	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand Copper with low conductor resistance single core wire in open or concealed system of wiring with specified IS-694:1990 & confirming to GTP of GROUP -A 4 sqmm.	Work done upto the Billed Quantity and the Quality is satisfactory
116	Supplying and flush mounting powder coated / galvanized metal box suitable for mounting modular switch plates. The box should be firmly flush mounted after due groove cutting in Brick/Stone/C.C wall 1-3Way	Work done upto the Billed Quantity and the Quality is satisfactory
117	Supplying and flush mounting powder coated / galvanized metal box suitable for mounting modular switch plates. The box should be firmly flush mounted after due groove cutting in Brick/Stone/C.C wall 6Way.	Work done upto the Billed Quantity and the Quality is satisfactory
118	Supplying and flush mounting powder coated / galvanized metal box suitable for mounting modular switch plates. The box should be firmly flush mounted after due groove cutting in Brick/Stone/C.C wall 8Way.	Work done upto the Billed Quantity and the Quality is satisfactory
119	Supplying and flush mounting powder coated / galvanized metal box suitable for mounting modular switch plates. The box should be firmly flush mounted after due groove cutting in Brick/Stone/C.C wall 10-12Way.	Work done upto the Billed Quantity and the Quality is satisfactory

RUDRAPRASAD CONSULTANTS BANGALORE

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ.
ಬೆ.ಮ.ನ.ಪಾ. ಬೆಂಗಳೂರು-106

No.5, 7th Main Malleswaram, Bangalore – 560003
Telefax: 9180 23444801, Mobile: 91 9972924526
Web: www.arkengineers.com e-mail: rechan6630@yahoo.co.in

120	Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/PVC box. 1 to 3 Module.	Work done upto the Billed Quantity and the Quality is satisfactory
121	Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/PVC box. 6 Module	Work done upto the Billed Quantity and the Quality is satisfactory
122	Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/PVC box. 8 Module.	Work done upto the Billed Quantity and the Quality is satisfactory
123	Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/PVC box12 Module	Work done upto the Billed Quantity and the Quality is satisfactory
124	Supplying and fixing of modular switch/ Socket/stepped electronic fan regulator/ dimmer/telephone socket etc on existing modular switch plate as per IS 3854 and IS 1293 GROUP A 6Amps one way.	Work done upto the Billed Quantity and the Quality is satisfactory
125	Supplying and fixing of modular switch/ Socket/stepped electronic fan regulator/ dimmer/telephone socket etc on existing modular switch plate as per IS 3854 and IS 1293 GROUP A 6Amps Two way.	Work done upto the Billed Quantity and the Quality is satisfactory
126	Stepped Fan Regulator.	Work done upto the Billed Quantity and the Quality is satisfactory
127	16Amps one way switch.	Work done upto the Billed Quantity and the Quality is satisfactory
128	TV/Telephone socket	Work done upto the Billed Quantity and the Quality is satisfactory
129	Supplying 50mm wooden plug, tapered from 50x50mm to 25x25mm and fixing by using binding wire before concreting a roof slab	Work done upto the Billed Quantity and the Quality is satisfactory

RUDRAPRASAD CONSULTANTS BANGALORE

#3, 7th Main Malleswaram, Bangalore – 560003
Telefax: 9180 23444801, Mobile: 91 9972924526
Web: www.arkengineers.com e-mail: rechan6630@yahoo.co.in

130	Supplying and fixing cast Aluminum round or oblong type bulk head fitting with GI wire guard, glass cover with 15Watts 230V CFL lamp	Work done upto the Billed Quantity and the Quality is satisfactory
131	Supplying CFL mirror light fitting with 1x11W CFL lamp, choke, Perspex cover and completely wired for use on 230V 50Hz AC supply.	Work done upto the Billed Quantity and the Quality is satisfactory
132	LED Indoor Supplying of 2' feet - LED PVC Square Batten ..W with high quality diffuser with Life of 25000 burning hours & 70% lumen maintenance with CRI > 80. Power Input: 220-240V @ 50Hz & Power factor >0.9 along with CE approved drivers. 5 years Warranty against any manufacturing defect working under standard electrical condition LED light fighting 4' - 28 watts complete and as per the directions of the Engineer-in-charge of the work	Work done upto the Billed Quantity and the Quality is satisfactory
133	Supply of recess mounted rolling type LED square or round Down light 12 watts with 4/6W GU 10 LED Lamp Rib Fabricated from Die cast aluminum with white powder coated prewired to mains connector with suitable driver & having swiveling unit of aluminum die cast eye ball & LED Lamp position retained by circular wire spring. 5 years Warranty against any manufacturing defect working under standard electrical condition	Work done upto the Billed Quantity and the Quality is satisfactory
134	Supply of LED Square Recessed Down lighter with 18W System Wattage. Housing shall be with powder coated pressure die cast aluminum alloy with corrosion resistant polyester powder coat & with extended heat sink. Diffuser/cover made of Lexan plastic material. Rated life shall be L70 @ 50000 Hrs. which shall has inbuilt electrical protection like over/under voltage, short circuit, overload, open circuit & miswiring. Driver is on constant current driver output driver @ 0.06A with PF > 0.9 with line voltage @ 220-240V @ 50/60Hz, driver efficiency > 85% & THD<15%. LED Efficiency > 130 lm/W at 1W & Fixture Efficiency >75lm/w with CRI > 75 with injection moulded Polycarbonate lens. 5 years Warranty against any manufacturing defect working under standard electrical condition	Work done upto the Billed Quantity and the Quality is satisfactory

ಸಹಾಯಕ ಕಾರ್ಯ ಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ.
ಜೆ ಜೆ ನಗರ, ಬೆಂಗಳೂರು-105
No.5, 7th Main Malleswaram, Bangalore – 560003
Telefax: 9180 23444801, Mobile: 91 9972924526
Web: www.arkengineers.com e-mail: rechan6630@yahoo.co.in

RUDRAPRASAD CONSULTANTS BANGALORE

135	60W highbay LED linear type light fixture make-crompton ,model -LHBL60CDL	Work done upto the Billed Quantity and the Quality is satisfactory
136	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. 5-32Amps SP	Work done upto the Billed Quantity and the Quality is satisfactory
137	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. 5-32Amps SP	Work done upto the Billed Quantity and the Quality is satisfactory
138	40-63Amps DP	Work done upto the Billed Quantity and the Quality is satisfactory
139	40-63Amps TPN	Work done upto the Billed Quantity and the Quality is satisfactory
140	Supplying and fixing regular MCB distribution boards on wall / wood board / flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB's single phase / 3 phase / single door with powder coated painting. Made out of 14 SWG MS enclosure.II - Double Door 12Way SP &N	Work done upto the Billed Quantity and the Quality is satisfactory
141	Supplying and fixing regular MCB distribution boards on wall / wood board / flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB's single phase / 3 phase / single door with powder coated painting. Made out of 14 SWG MS enclosure.III - Double Door 4Way TP &N	Work done upto the Billed Quantity and the Quality is satisfactory
142	Supplying, fixing and wiring Earth Leakage Miniature Circuit Breaker [ELMCB] 240/450V up to 300mA sensitivity on existing wood/panel board. 32-40 Amps 2 pole	Work done upto the Billed Quantity and the Quality is satisfactory

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬೆ.ಮ.ನ.ಪ. ಬೆಂಗಳೂರು-106

RUDRAPRASAD CONSULTANTS BANGALORE

#3, 7th Main Malleswaram, Bangalore – 560003
Telefax: 9180 23444801, Mobile: 91 9972924526
Web: www.arkengineers.com e-mail: rechan6630@yahoo.co.in

143	Supplying and running of GI/Copper strips for grounding connections, using necessary fixing materials as required. GI strip 25x3mm	Work done upto the Billed Quantity and the Quality is satisfactory
144	Supplying fixing and wiring earth electrode for grounding of lifts, transformers, DG sets etc. using 40mm dia 2.9mm thick 2.5 mtr long GI pipe with GI funnel with mesh and suitable size reducer fixed on the top of the earth electrode. The funnel should be enclosed in a CC chamber of 400x400x400mm with a cast iron cover. The earth electrode shall have staggered holes of 12mm dia and the electrode should be covered 150mm all-round with alternate layers of salt and charcoal from the bottom of the CC chamber. The connection from the electrode is to be established through GI strip using GI bolts and nuts.	Work done upto the Billed Quantity and the Quality is satisfactory
145	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc., complete. 14SWG	Work done upto the Billed Quantity and the Quality is satisfactory
146	600x600x3mm GI Plate	Work done upto the Billed Quantity and the Quality is satisfactory
148	Supplying capacitor type ceiling fan complete with down rod blades shackle, canopies etc, for operation on 230 volts, 50 cycles. single phase AC supply conforming to ISS-374-1979 and with double ball bearing system: 48" sweep (1200mm)	Work done upto the Billed Quantity and the Quality is satisfactory
149	Supplying and fixing of slim patty fitting, made out of CRCA Sheet metal body with locking type holder completely wired. Excluding Ballast & Fluorescent Tube	Work done upto the Billed Quantity and the Quality is satisfactory

RUDRAPRASAD CONSULTANTS BANGALORE

#3, 7th Main Malleswaram, Bangalore – 560003
Telefax: 9180 23444801, Mobile: 91 9972924526
Web: www.arkengineers.com e-mail: rechan6630@yahoo.co.in